

C1 56553

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE RECEIVED MM DD / YY

DATE WELL COMPLETED MM DD / YY

DEPTH OF WELL TO NEAREST FOOT

OK 11/26/18 SC HO-17-0332

OWNER, WELL SITE ADDRESS, TOWN, SUBDIVISION, SECTION, LOT

WELL LOG Not required for driven wells

GROUTING RECORD WELL HAS BEEN GROUTED

PUMPING TEST

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

TYPE OF GROUTING MATERIAL (Circle one)

HOURS PUMPED (nearest hour)

DESCRIPTION (Use additional sheets if needed)

CEMENT, BENTONITE CLAY

PUMPING RATE (gal. per min.)

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Brown Sand Clay, Grey 4/5, Fracture, Grey 2/5, Broken 4/5.

NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER, DEPTH OF GROUT SEAL

METHOD USED TO MEASURE PUMPING RATE

CASING RECORD

WATER LEVEL (distance from land surface)

MAIN CASING TYPE, Nominal diameter top (main) casing, Total depth of main casing

BEFORE PUMPING

OTHER CASING (if used) diameter, depth

WHEN PUMPING

SCREEN RECORD

TYPE OF PUMP USED (for test)

NUMBER OF UNSUCCESSFUL WELLS:

DEPTH (nearest ft.)

PUMP INSTALLED

WELL HYDROFRACTURED

ACCHSREN

DRILLER INSTALLED PUMP (CIRCLE) (YES OR NO)

CIRCLE APPROPRIATE LETTER A, E, P

SLOT SIZE 1, 2, 3

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION"

DIAMETER OF SCREEN (NEAREST INCH)

TYPE OF PUMP INSTALLED

DRILLERS LIC. NO., DRILLERS SIGNATURE, LIC. NO.

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

PLACE (A,C,J,P,R,S,T,O) IN BOX 29

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

CAPACITY: GALLONS PER MINUTE (to nearest gallon)

TELESCOPE CASING, LOG INDICATOR, OTHER DATA

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

LAND SURFACE (nearest foot)

LATITUDE 39.196060

LONGITUDE 76.957108

(DEFAULT COORD. WGS 84)

Pursuant to §10-624 of the State Govt. Article of the Maryland Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04.

TAG: 12/13/18

B 1	SEQUENCE NO. (MDE USE ONLY) 59730	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL <i>563967</i> please type	STATE PERMIT NUMBER H0-17-0332 fill in this form completely
	1 2 3 6		70 79

OWNER INFORMATION

Date Received (ARA) *07-27-18*

8 MM DD YY 13

Trinity Homes
15 Last Name Owner First Name 34

3675 Park Ave Suite 301
36 Street or RFD 55

Ellicott City Md 21043
57 Town 70 State 72 Zip 76

LOCATION OF WELL

Howard
8 COUNTY 21

The Estates at River Hill
23 SUBDIVISION 42

SECTION **44 46** LOT **8** 48 50

Highland
52 NEAREST TOWN 71

DRILLER INFORMATION *Andrew Hausman MS0224*

Allen Compton M SD 009
Driller's Name 76 License No. 81

Fogles Well Drilling, LLC
Firm Name

P.O. Box 202 Woodbine Md 21097
Address

Andrew R. Hausman 7-27-18
Signature Date

SOURCES OF DRILLING WATER

1. **Well water**

2.

3.

Allnut Lane
11 STREET ADDRESS 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

NORTH
 WEST
 EAST
 SOUTH

34 1000 37
DISTANCE FROM ROAD FT

ENTER FT OR MI 38 39

TAX MAP: **34** BLK: **23** PARCEL **389**

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) **5**
8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) **500**
14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)

INDUSTRIAL, COMMERCIAL, DEWATERING

PUBLIC WATER SUPPLY WELL

TEST, OBSERVATION, MONITORING

OPEN LOOP GEOTHERMAL

CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13)
COUNTY NAME COUNTY NO.

STATE SIGNATURE _____ INSERT S → 41

DATE ISSUED **9/18/18** *SLW* **9/18/19**
43 MM DD YY 48 CO SIGNATURE EXP. DATE

APPROXIMATE DEPTH OF WELL **300** FEET
24 28

PROPOSED LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL

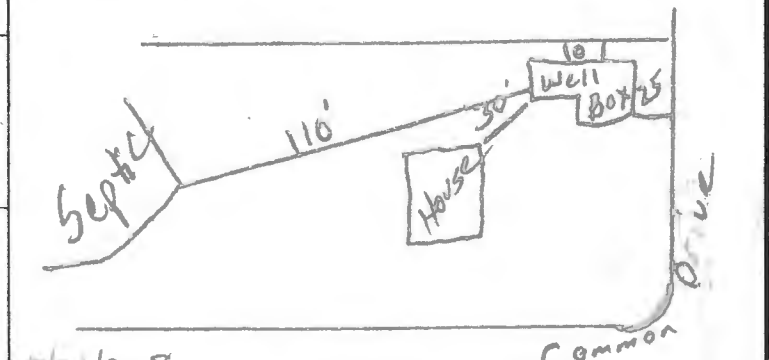
METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN

AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary)

CABLE REVERSE-ROTARY DRIVE-POINT

other _____



REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

THIS WELL WILL NOT REPLACE AN EXISTING WELL

THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS

THIS WELL WILL DEEPEM AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52

12/21/2018

No activity in GPS well

12/25/2018

lead drill

Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROP. PERMIT NUMBER **H02018005**

PERMIT No. **H0-17-0332**
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED: **SEE ATTACHED MEMO**

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WELL & SEPTIC PROGRAM
TEL: (410)313-1771 FAX: (410)313-2648**

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: Do-It Plumbing & Heating LLC Telephone #: 246 882 0069
Address: 104 Estelle Ct
Sykesville md 21784

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer

License # and name of individual responsible for the field installation:

Name (Print): Dyane Gilbert License# 21897

***A licensed individual must perform the actual installation. Apprentices must be under the supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification. Unlicensed individuals may be reported to the appropriate licensing agency.**

Name of Property Owner: Trinity Homes Inc Telephone #: 410-480-0023
Subdivision: Estate of River Hill Lot #: B Well Tag #: HO-17-0332
Site Address: 13605 Maple way
Highland md 20777

Submersible Pump Data	Pitless Adapter	Well Cap and Electric Conduit
Make: <u>DAB</u>	Make: <u>Posner</u>	Two piece watertight cap: <u>yes</u>
Model #: <u>BF-0710-122</u>	Model#: <u>P-800-SS</u>	Screened, vented well cap: <u>yes</u>
Pump Capacity: <u>7</u> GPM	Depth: <u>42</u> (36" min)	Cap secured to casing: <u>yes</u>
Well Yield: <u>10</u> GPM	NSF/WSC approved: <u> </u>	Conduit min 18" B.G.: <u>yes</u>
Depth of well encountered at time of pump installation: <u>200</u> (feet)	Conduit secured to well cap: <u>yes</u>	

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Torque arrestors Cable guards or other acceptable method used- Must circle one

Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing **NO**

Piping to house

Type: Poly
PSI: yes (160 psi min)
Depth of supply line: yes (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: yes
Length of sleeve(5' minimum from foundation): 10 ft
Sleeve sealed properly: yes

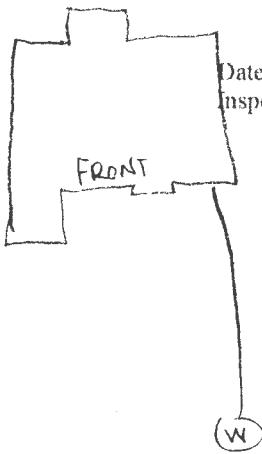
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. **If this cannot be accomplished, contact this office for approval prior to installation.**

Signature of company representative responsible for installation: [Signature] date: April-18-2023

For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: 4/17/23 Date Insp. Approved: 4/19/23 Inspector: [Signature]

Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade _____
Two piece cap installed and attached to casing securely _____
Elec. conduit extends at least 18" below grade/attached to cap properly _____
Safety rope not outside of well cap/casing _____
Correct well tag attached properly and casing 8" above finished grade _____
Water supply line sleeved adequately at house connection _____
Adequate grout observed below pitless adapter _____



Maura J. Rossman, M.D., Health Officer

INTERIM CERTIFICATE OF POTABILITY
PERMANENT DEVIATION FOR RADIUM

Expiration Date – July 24, 2024

January 24, 2024

Homeowner
13605 Noble Way
Highland, MD 20777

RE: Est. @ River Hill, Lot 8
13605 Noble Way
Building Permit: B19003293
Well Permit: HO-17-0332

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **11/30/2023**. Final approval of the well line connection to the dwelling was granted on **4/19/2023**. The well construction was completed on **10/25/2018**. Water samples were collected on 12/19/2023.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking.

Gross Alpha and Beta samples were also collected on **10/25/2018**. Results showed a Gross Alpha level of **38.4 ± 4.4 pCi/L** and a Gross Beta level of **25.2 ± 2.9 pCi/L**. **This exceeds the maximum contaminant level (MCL)** of 15 pCi/L for Gross Alpha and the Gross Beta was below the target level of 50pCi/L (roughly equivalent to the annual dose rate of 4 millirems per year).

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After installation of a radionuclide removal device (water softener), post-treatment water samples were collected on **12/19/2023** and indicated a combined Radium 226/228 level of **1.0 pCi/L ± 0.7 pCi/L** which is below the MCL of 5 pCi/L.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the radionuclide removal system effectively maintains a Gross Alpha level of less than **15 pCi/L**, a Gross Beta level of less than **50 pCi/L**, and a Radium 226/228 level of less than **5 pCi/L**.

Furthermore, it will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.
2. It is recommended that a Maryland certified water laboratory certified for radionuclide analysis perform a yearly radionuclide analysis.

Maura J. Rossman, M.D., Health Officer

3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this permanent deviation. **A person who fails to make this disclosure is subject to the penalties set out in COMAR 26.04.04.12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.**

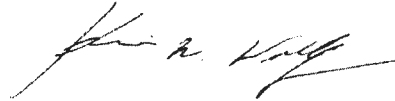
This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-17-0332. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. **Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of Violation and is punishable as a misdemeanor under the *Annotated Code of Maryland, Environment Article, 9-1311*, subject to a fine of up to \$500 or imprisonment not to exceed three months.**

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

In closing, please refer to our "[Homeowner Fact Sheet](#)" which illustrates a better understanding for your onsite sewage disposal system. You will also find a link to Maryland Department of the Environment website which describes in further detail operation and maintenance of your septic system.

Approving Authority,



Kevin M Wolf, L.E.H.S., R.E.H.S./RS, Supervisor
Groundwater Management Section
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
Community Hygiene Program
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554

REPORT OF ANALYSIS

Laboratory ID #: 163306 Account #: 4035
Reference: ERH 8 Client: Trinity Quality Homes, Inc.
Location: 13605 Noble Way Requested By: Michael Pfau
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 12/19/2023 1150 Site: Pressure Tank
Date/Time Rec'd: 12/19/2023 1358 Treatment: Prior to Sediment Filter & Softener
Chlorine ppm: Free: ND Total: ND pH: 6.8
Collected By: J. Yeager 0819JY Well #: HO-17-0332

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	12/20/2023 / 1040 / KDR
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	12/20/2023 / 1040 / KDR
Nitrate.	0.82	mg/L (as N)	10	EPA 300.0	12/19/2023 / 1629 / KDR
Turbidity	3.16	NTU	<10	SM2130B	12/20/2023 / 0830 / KDR
Sand	ND	mg/L	5	Visual/Gravimetric	12/20/2023 / 0840 / KDR

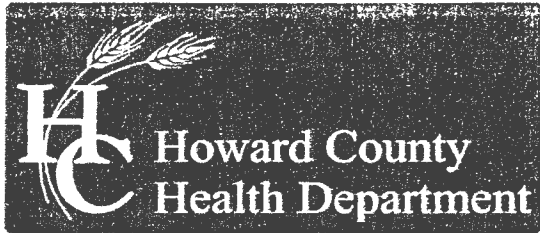
NOTES:

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NTU = Nephelometric Turbidity Units
- 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 5 ND:None Detected
- 6 Visual well check: Sealed, vented cap
- 7 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy

Building Permit # : B19003293

Date Reported: 12/20/2023



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045 Main: 410-313-2640 | Fax: 410-313-2648 TDD 410-313-2323 | Toll Free 1-866-313-6300 www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

Dr. Maura J. Rossman, M.D., Health Officer

TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

Well Site Location:

The Estates at River Hill 1-157 Parcel A Albright Lane
Subdivision/Property Name Lot # Road Name

The well site has been staked by Robert H. Vogel Engineering, Inc.
(professional land surveyor or company employing professional land surveyors)
on _____ (date) and does not require a site inspection.

The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

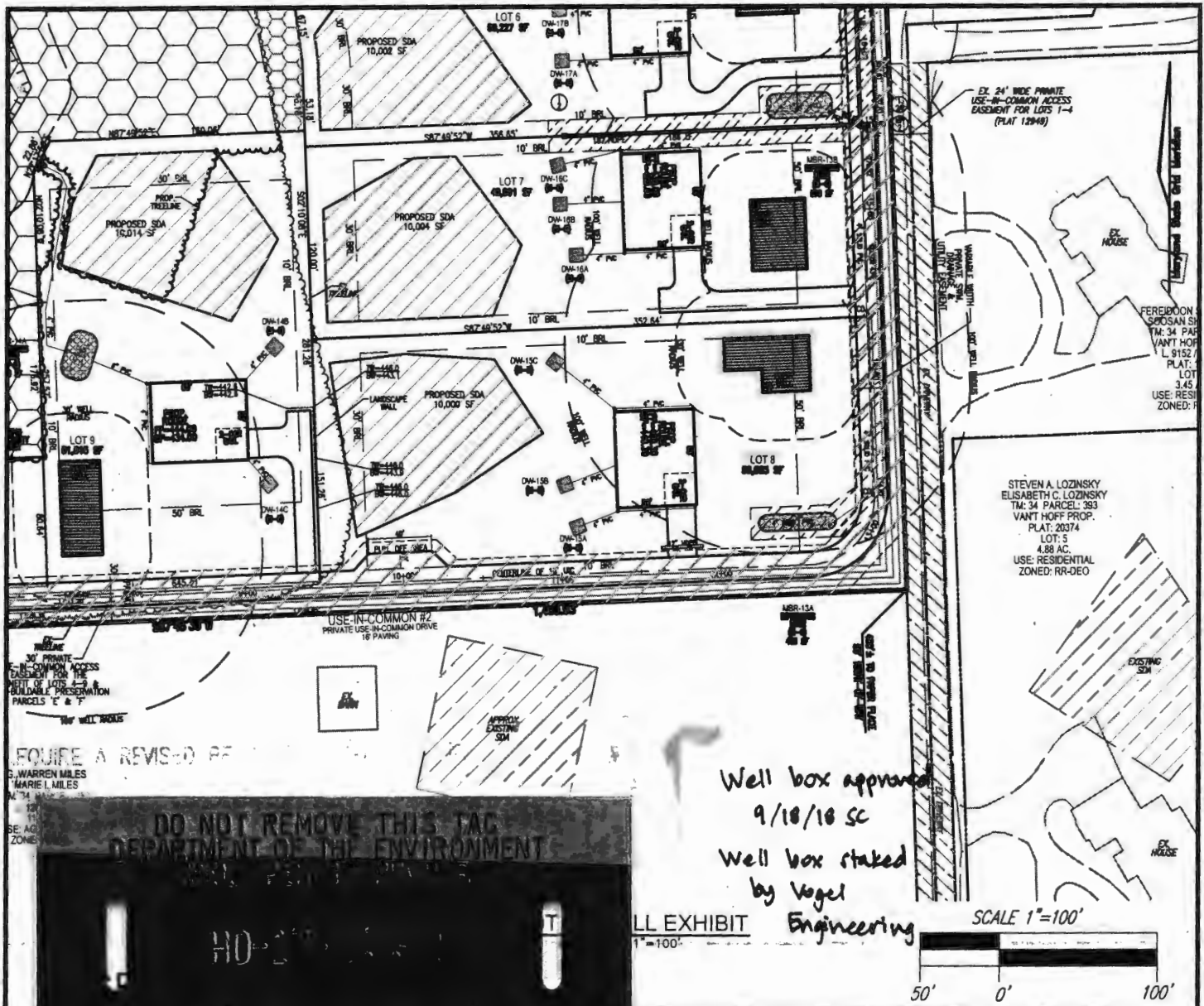
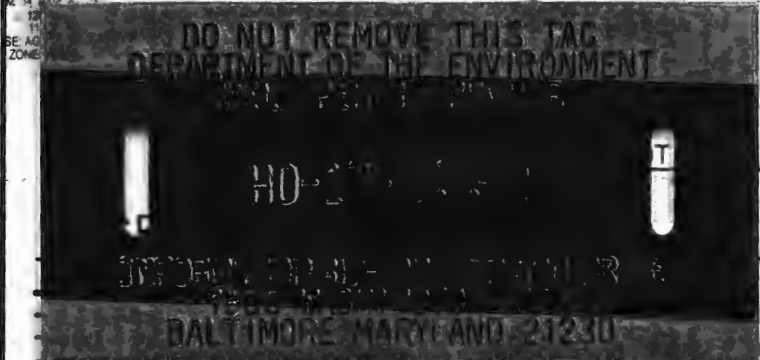
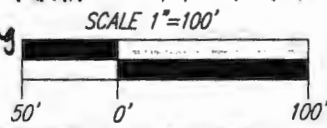


FIGURE A REVISED PART
S. WARREN MILES
MARIE L. MILES



WELL EXHIBIT
1"=100'



- EXISTING STREAM BUFFER
- EXISTING STREAM
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING WETLANDS
- EXISTING WETLAND BUFFER
- EXISTING SPECIMEN TREES

- FLOOD FOOT
- EX. 20' DRAINAGE & UTILITY EASEMENT (PLAT 12949)
- PROP. PRIVATE USE-IN-COMMON ACCESS EASEMENT
- PROP. PUBLIC SWM, DRAINAGE & UTILITY EASEMENT
- PROP. 35' PRIVATE MONUMENT EASEMENT

- PROP. SEWAGE DISPOSAL AREA
- PROP. WELL AREA
- PROP. STORMDRAIN
- EXISTING WELL
- PROPOSED WELL

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 N. RIDGE ROAD, SUITE 110 ELLICOTT CITY, MD 21043 TEL: 410.481.7888 FAX: 410.481.8961

SCALE: 1"=100'
DRAWN BY: JMR
CHECKED BY: RHV
DATE: JUNE 2018
W. O. #: 15-39
SHEET #: 1 OF 1

WELL EXHIBIT - LOT 8
THE ESTATES AT RIVER HILL
LOTS 1-15, BUILDABLE PRESERVATION PARCEL 'A'
AND NON-BUILDABLE PRESERVATION PARCELS 'B-H'
A RE-SUBDIVISION OF THE "GREENE PROPERTY" LOT 1

PARCEL: 389
TAX MAP: 34 GRID: 23
5TH ELECTION DISTRICT

ZONED: RR-DEO
L 4772 / F. 265
HOWARD COUNTY, MARYLAND

Maura J. Rossman, M.D., Health Officer

MEMORANDUM

TO: Allen Compton (MSD 009)

FROM: Sarah Collins, L.E.H.S. SEC
Howard County Health Department
Well and Septic Program

DATE: September 17, 2018

RE: Well permits for the Estates at River Hill

The following conditions apply to the well permits for the Estates at River Hill:

- A radium sample is required at the yield test for all lots.
- Sodium, chloride, and total dissolved solids samples are required at the yield test for Lots 1, 2, 3, 4, 10, and 11.
- Steel casing to 50' or 10' into competent bedrock, whichever is deeper, is required for Lots 5, 7, and 8.
- Per the Groundwater Appropriations Permit from Maryland Department of the Environment, any well less than 100' from another well AND on a lot less than one acre requires a simultaneous yield test. Lot 10 is the only lot less than one acre; any well less than 100' from Lot 10 requires a simultaneous yield test with the Lot 10 well.

Feel free to contact me at 410-313-6287 or SCollins@howardcountymd.gov with any questions.

Cc: Vogel Engineering, Rob Vogel (rvogel@vogeleng.com)
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554

REPORT OF ANALYSIS

Laboratory ID #: 163308	Account #: 4035
Reference: ERH 8	Client: Trinity Quality Homes, Inc.
Location: 13605 Noble Way Highland, MD 20777	Requested By: Michael Pfau
Date/ Time Collected: 12/19/2023 1211	Source: Well Water
Date/Time Rec'd: 12/19/2023 1358	Site: Kitchen Sink Tap
Chlorine ppm: Free: ND Total: ND	Treatment: Sediment Filter & Softener
Collected By: J. Yeager 0819JY	pH: 6.9
	Well #: HO-17-0332

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	<1.4	pCi/L	15	900.0	12/22/2023 / 0735 / MJN
Gross Beta, Short Term	1.7	pCi/L	50	900.0	12/22/2023 / 0735 / MJN
Gross Alpha, Long Term	<1.0	pCi/L	15	900.0	12/29/2023 / 0622 / MJN
Gross Beta, Long Term	<1.5	pCi/L	50	900.0	12/29/2023 / 0622 / MJN
Radium-226	0.4 /	pCi/L	****	903.0	1/4/2024 / 0816 / MJN
Radium-228	0.6 ✓	pCi/L	****	Ra-05	1/3/2024 / 1003 / MJN

NOTES:

- 1 ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- 2 Long Term Gross Alpha Detection Limit: 1.0 pCi/L; Long Term Gross Alpha Error: +/- 0.8 pCi/L
- 3 Long Term Gross Beta Detection Limit: 1.5 pCi/L; Long Term Gross Beta Error: +/- 0.9 pCi/L
- 4 pCi/L = picocuries per liter
- 5 Radium 226 Detection Limit: 0.3 pCi/L; Radium 226 Error: +/- 0.3 pCi/L
- 6 Radium 228 Detection Limit: 0.5 pCi/L; Radium 228 Error: +/- 0.4 pCi/L
- 7 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 8 Short Term Gross Alpha Detection Limit: 1.4 pCi/L; Short Term Gross Alpha Error: +/- 1.0 pCi/L
- 9 Short Term Gross Beta Detection Limit: 1.5 pCi/L; Short Term Gross Beta Error: +/- 1.0 pCi/L
- 10 Sub-contracted to Reference Lab #278
- 11 ND:None Detected
- 12 Visual well check: Sealed, vented cap
- 13 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy
 Building Permit # : B19003293

Date Reported: 1/5/2024

Reviewed By: Loi Ob

Maura J. Rossman, M.D., Health Officer

December 10, 2018

Tim Keane
Trinity Homes
3625 Park Avenue
Ellicott City, Maryland 21043

RE: Estates at River Hill Lot 8
Allnutt Lane
Well Tag: HO – 17 – 0332

Dear Mr. Keane:

A sample was collected during a yield test on October 25, 2018 and submitted to the Maryland Department of Health Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in a water supply. These naturally occurring radioactive nuclides have been demonstrated to be present in a certain type of geologic formation known as the Baltimore Gneiss which exists in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of 38.4 ± 4.4 picocuries/liter (pCi/L), while the **Gross Beta** level was 25.2 ± 2.9 pCi/L. The **Gross Alpha** result was above its **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below (though higher than typically seen) its targeted standard of 50 pCi/L (roughly equivalent to the **annual dose rate** of 4 millirems/year).

At the time of testing and with respect to these parameters, the well water supply **does not meet** EPA regulatory standards. Additional testing **for these parameters** will be required to secure the future Use & Occupancy. Additional raw water samples for **short and long term Gross Alpha and Gross Beta, plus Radium 226 / 228** will be needed to assess any future treatment needs. Alternatively, treatment such as a water softener system or point of use reverse osmosis (R/O) could be considered. If installed, post-treated sampling for **short and long term Gross Alpha, Gross Beta and Radium 226 / 228** will be **required**. Please **note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be needed to help secure Use & Occupancy.

A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 if you have any further questions or to schedule additional testing.

Sincerely,



Bert Nixon, Director
Bureau of Environmental Health

Enclosure

✓ cc: Property file

SEND REPORT TO:

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Sciences
RADIATION LABORATORY
1770 Ashland Avenue
Baltimore, Maryland 21205

Lab No.

Howard County Health Department
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, Maryland 21045

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: E-MAIL AT RIVER HILL

County: HOWARD

Sample Source: LOT 8

Location: HO-17-0332

(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A HOXC321K1
Bottle B _____

Radon-222 Field Blank Bottle A _____
Bottle B _____

County 17

Plant No. _____

CHECK (one per Box)

Type	
Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code: _____

Federal Project: _____

Collector: CRUG, JOSEPH

Telephone No.: 410-315-2043

Date Collected: 10/25/18

Time Collected: _____ a.m. 14:00 p.m.

Field pH: 7.5

Field Chlorine: ND

Nitric Acid Preserved: Yes No

Iced: Yes No

Remarks: SAMPLE COLLECTED AT YIELD

TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/> Gross Alpha	4000	0529	EPA900-J	38.4 ± 4.4	10/29/18	MT	10/31/18
<input checked="" type="checkbox"/> Gross Beta	4100	0529	EPA900-J	25.2 ± 2.9	10/29/18	MT	10/31/18
<input type="checkbox"/> Radium-226	4020						
<input type="checkbox"/> Radium-228	4030						
<input type="checkbox"/> Total Uranium	4006						
<input type="checkbox"/> Radon-222 (Bottle A)	4004						
<input type="checkbox"/> Radon-222 (Bottle B)	4004						
<input type="checkbox"/> Radon Field Blank A	4004						
<input type="checkbox"/> Radon Field Blank B	4004						
<input type="checkbox"/> Tritium							
<input checked="" type="checkbox"/> Gross Alpha		0529	EPA900-J	33.9 ± 4.2	10/29/18	MT	10/31/18
<input checked="" type="checkbox"/> Gross Beta		0529	EPA900-J	27.1 ± 3.0	10/29/18	MT	10/31/18

Date Received: _____ Received By: _____

Data Release Signature: [Signature] Date: 10/28

Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?			
Sample pH < 2.0?			
Received within holding time?			

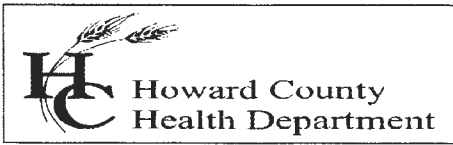
•Tel. No.: (443) 681-3766 •Fax No.: (443) 681-4507

FORM REVISED 05/15
DHMH 4540 05/17

PROGRAM COPY

SAMPLE TESTED AS RECEIVED

Invoice



Bureau of Environmental Health
 Attn: Bert Nixon, Director

DATE: NOVEMBER 13, 2018
 DATES OF SERVICE: OCTOBER 25 & 30, 2018
 INVOICE #: 2018-002

8930 Stanford Boulevard, Columbia, MD 21045
 Phone 410-313-2640 Fax 410-313-2648
 www.hchealth.org

BILL TO Tim Keane
 Trinity Homes
 3625 Park Avenue
 Ellicott City, Maryland 21043

COMMENTS Payment due upon receipt. Letter and results will be released upon receipt of payment.

DATE	DESCRIPTION	BALANCE	AMOUNT
10/25/18	Gross alpha/beta testing performed for Lot 8 Estates at River Hill HO - 17 - 0332		\$45.00
10/30/18	Gross alpha/beta testing performed for Lot 7 Estates at River Hill HO - 17 - 0331		\$45.00
			AMOUNT DUE
			\$90.00

Please detach and return with payment.

REMITTANCE	
Invoice #	2018-002
Site Information	Estates at River Hill Lots 7 & 8
Amount Due	\$90.00

Make Checks Payable to: **Director of Finance** Mail Payments to: **Bureau of Env. Health**



Bureau of Environmental Health
 8930 Stanford Boulevard, Columbia, MD 21045
 Main: 410-313-2640 | Fax: 410-313-2648
 TDD 410-313-2323 | Toll Free 1-866-313-6300
 www.hchealth.org
 Facebook: www.facebook.com/hocohealth
 Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN ON-SITE TREATMENT SYSTEM

This agreement is entered into by and between the Howard County Health Department ("the Health Department") and Joshua PFAU ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 13605 NOBLE WAY, Highland MD 20777 and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 34, Block # 23, Parcel # 389, Deed Reference # _____ and Tax Account # _____ ("the Property"). LOT 8

WHEREAS, the Property lacks an available public drinking water source and is required to have and individual well as the source of drinking water for the residence of the property.

WHEREAS, the Owner has installed a residential drinking well under well permit 40-17-0332 that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi /L), 4 millirems per year (mrem/yr) and/or 5pCi/L respectively.

WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

WHEREAS, MDE regulations permit the Health Department to issue as a special condition, a permanent deviation to the Certificate of Potability for individual wells where treatment has been installed to meet the maximum contaminate levels (MCL's) for radionuclides.

WHEREAS, MDE has determined that radium can be effectively removed from the drinking water by the use of treatment devices (e.g., ion exchange or reverse osmosis).

WHEREAS, the Owner is requesting that the Health Department issue a Certificate of Potability contingent upon installation and maintenance of a water treatment device to reduce radionuclides.

WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

NOW THEREFORE, the parties have agreed to the following terms and conditions:

1. The Owner will record this Agreement among the Land Records of Howard County, Maryland and provide confirmation to the Health Dept.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department

shall verify that the treatment device is operating effectively and the Owner agrees to allow access to the Health Department to collect a follow-up sample(s).

3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable gross alpha, gross beta (short and long term) and radium 226 / 228 levels.
4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or long term impacts to health or property, under any circumstance or including, but not limited to, treatment device failure, improper maintenance or installation, or defect. The Health Department does not warranty or guarantee that the device will adequately or properly function and the Owner agrees to implement and pay for any necessary changes or corrections.
5. The Owner acknowledges and agrees that neither the Health Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system or treatment device.
6. This Agreement shall not be construed to limit any authority of the Health Department to protect the public health, safety or enjoyment of property or to issue any other orders to take any other action, which is now or may hereafter be within its authority.
7. This agreement contains the entire agreement and understanding between the Health Department and the Owner. There are no additional terms other than as contained in this Agreement. This Agreement may not be modified except in writing signed by each of the parties or their authorized representatives.
8. The Agreement shall run with the land and binds the Owner, his heirs, successors, and assigns. The owner agrees to provide a copy of this agreement to any purchaser or lessee of the property.
9. The laws of the State of Maryland govern the provisions of all transactions.

The parties have signed and sealed this Agreement on the dates set forth below.

1
Owner: Michael PFAU Date: 03-01-23 Buyer: [Signature] Date: 3/1/23

Owner _____ Date _____ Buyer _____ Date _____

[Signature]
Howard County Health Department Date: 3/6/23